In the Claims

The listing of claims will replace all prior versions and listings of claims in the application.

Listings of claims

1. (original) A compound of formula I, a pharmaceutically acceptable salt thereof, diastereomers, enantiomers, or mixtures thereof:

$$R^{5}$$
 R^{6}
 R^{7}
 R^{7}
 R^{7}
 R^{2}
 R^{3}
 R^{3}

wherein

R¹ is selected from –H and C₁₋₆alkyl;

R² and R³ are independently selected from –H and C₁₋₆alkyl;

 R^4 , R^5 , R^6 and R^7 are independently selected from –H, -OH, halogen, -NO₂, C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} alkoxy, C_{1-6} alkyl- $S(=O)_2$ -O-, C_{6-10} aryl- $S(=O)_2$ -O-, C_{1-6} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-6}$ alkyl) $_2$ N- $S(=O)_2$ -O-; or any two adjacent groups selected from R^4 , R^5 , R^6 and R^7 form a portion of a 5 or 6-membered ring that fused with the benzene ring of formula I, wherein said C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} alkoxy, C_{1-6} alkyl- $S(=O)_2$ -O-, C_{6-10} aryl- $S(=O)_2$ -O-, C_{1-6} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-6}$ alkyl) $_2$ N- $S(=O)_2$ -O- are optionally substituted with one or more groups selected from halogen, C_{1-3} alkoxy, -OH, -NO $_2$, C_{1-3} alkyl, -NH $_2$, and - CO_2 - C_{1-3} alkyl;

E is a 5-membered heterocyclyl optionally substituted with one or more groups selected from halogen, C_{1-6} alkyl, $-C(=O)-O-C_{1-6}$ alkyl, C_{6-10} aryl, C_{6-10} aryl- C_{1-4} alkyl, and C_{6-10} aryl- C_{1-4} alkyl, and C_{6-10} aryl- C_{1-4} alkyl, and C_{6-10} aryl- C_{1-6} alkyl, and C_{1-6} alkyl, a

D is a divalent group comprising a benzene ring.

2. (original) A compound according to claim 1, wherein

R¹ is selected from –H and C₁₋₃alkyl;

R² and R³ are independently C₁₋₃alkyl;

 R^4 , R^5 , R^6 and R^7 are independently selected from -H, -OH, halogen, $-NO_2$, C_{1-6} alkyl, phenyl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, tetrahydropyranyloxy, pyridinyloxy, morpholinyloxy, tetrahydropyranyl- C_{1-4} alkoxy, pyridinyl- C_{1-4} alkoxy, morpholinyl- C_{1-4} alkoxy, phenoxy, benzyloxy, C_{1-6} alkyl- $S(=O)_2$ -O-, phenyl- $S(=O)_2$ -O-, C_{1-3} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-3}$ alkyl) $_2$ N- $S(=O)_2$ -O-; or any two adjacent groups selected from R^4 , R^5 , R^6 and R^7 form a divalent group selected from -O- CH_2 -O- and -O- CH_2 -CH $_2$ -O-, wherein said C_{1-6} alkyl, phenyl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, tetrahydropyranyloxy, pyridinyloxy, morpholinyloxy, tetrahydropyranyl- C_{1-4} alkoxy, pyridinyl- C_{1-4} alkoxy, morpholinyl- C_{1-4} alkoxy, phenoxy, benzyloxy, C_{1-6} alkyl- $S(=O)_2$ -O-, phenyl- $S(=O)_2$ -O-, C_{1-3} alkyl-NH- $S(=O)_2$ -O-, and C_{1-3} alkyl) $_2$ N- $S(=O)_2$ -O- are optionally substituted with one or more groups selected from halogen, methoxy, -OH, -NO $_2$, and C_{1-3} alkyl;

E is selected from furyl, thienyl, imidazolyl, pyrazolyl, and thiazolyl, wherein said furyl, thienyl, imidazolyl, pyrazolyl, and thiazolyl are optionally substituted with one or more groups selected from halogen, C₁₋₄alkyl, -C(=O)-O-C₁₋₃alkyl, phenyl, benzyl, and benzenesulfonyl; and

D is selected from phenylene, pyridylene,
$$\begin{array}{c} & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$
 and
$$\begin{array}{c} & & \\ & & \\ & & \\ & & \\ \end{array}$$

3. (original) A compound according to claim 1, wherein

R¹ is selected from –H and methyl;

R² and R³ are selected from ethyl and isopropyl;

 R^4 , R^5 and R^6 are independently selected from –H, -OH, halogen, -NO₂, C_{1-6} alkyl, phenyl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, tetrahydropyranyloxy, pyridinyloxy, morpholinyloxy, tetrahydropyranyl- C_{1-4} alkoxy, pyridinyl- C_{1-4} alkoxy, morpholinyl- C_{1-4} alkoxy, phenoxy, benzyloxy, C_{1-6} alkyl- $S(=O)_2$ -O-, phenyl- $S(=O)_2$ -O-, C_{1-3} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-3}$ alkyl)₂N- $S(=O)_2$ -O-; or any two adjacent groups selected from R^4 , R^5 and R^6 form –O- CH_2 -O-, wherein said phenoxy, benzyloxy, and phenyl- $S(=O)_2$ -O- are optionally substituted with one or more groups selected from halogen and methoxy;

R⁷ is selected from –H and C₁₋₃alkoxy;

E is selected from furyl, thienyl, imidazolyl, pyrazolyl, and thiazolyl, wherein said furyl, thienyl, imidazolyl, pyrazolyl, and thiazolyl are optionally substituted with one or more

groups selected from halogen, C₁₋₄alkyl, -C(=O)-O-C₁₋₃alkyl, phenyl, benzyl, and benzenesulfonyl; and

$$\rightarrow$$
OCH $_2$ $\stackrel{\stackrel{\bullet}{\downarrow}}{\downarrow}$

D is selected from para-phenylene, para-benzylene,

4. (original) A compound according to claim 1, wherein

R¹ is selected from –H and methyl;

R² and R³ are ethyl;

 R^4 is selected from -H, NO_2 and methoxy, R^5 is selected from -H, -Br, -F, -OH, methoxy, methylsulfonyloxy, N, N-dimethylsulfamyloxy, and R^6 is selected from -H, -OH, $-NO_2$, methoxy, ethoxy, isopropyloxy, neopentyloxy, cyclobutyloxy, 4-tetrahydro-2H-pyranyloxy, 2-(4-morpholino)ethoxy, benzyloxy, phenoxy, 4-fluorophenoxy, 3-methoxyphenoxy, 4-methoxyphenoxy, 3-pyridinyloxy, methanesulfonyloxy, benzenesulfonyloxy, dimethylsulfamyloxy; or any two adjacent groups selected from R^4 , R^5 and R^6 form -O- CH_2 -O-;

R⁷ is selected from –H and methoxy;

E is R¹¹, wherein A and B are independently selected from C, N and S, and G is selected from C, N, O and S with a proviso that at least one of A, B and G is C, at most one of A, B and G is S and one of the bonds between A and B, and between B and G is a double bond;

wherein R^8 is selected from -H, -CI, methyl, $-CO_2Me$ and phenyl; R^9 is selected from -H and methyl; R^{10} is selected from -H, methyl, n-butyl and phenyl; R^{11} is selected from -H, methyl, benzyl and benzenesulfonyl.

$$\rightarrow$$
 OCH $_2$ $\stackrel{1}{\xi}$

D is selected from para-phenylene, para-benzylene,

5. (original) A compound selected from:

COMPOUND 12.1.1: N,N-Diethyl-2-{[2-(2-furylmethyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl]methoxy}benzamide

COMPOUND 12.1.2: 2-{[6,7-Dimethoxy-2-(thien-3-ylmethyl)-1,2,3,4-tetrahydroisoquinolin-1-yl]methoxy}-N,N-diethylbenzamide

COMPOUND 12.1.3: N,N-Diethyl-3-{[2-(2-furylmethyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl]methoxy}benzamide

COMPOUND 12.1.4: 3-{[6,7-Dimethoxy-2-(thien-3-ylmethyl)-1,2,3,4-tetrahydroisoquinolin-1-yl]methoxy}-N,N-diethylbenzamide

COMPOUND 12.1.5: N,N-Diethyl-4-{[2-(2-furylmethyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl]methoxy}benzamide

COMPOUND 12.1.6: 4-{[6,7-Dimethoxy-2-(thien-3-ylmethyl)-1,2,3,4-tetrahydroisoquinolin-1-yl]methoxy}-N,N-diethylbenzamide

COMPOUND 12.1.7: 2-({6,7-Dimethoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}methoxy)-N,N-diethylbenzamide

COMPOUND 12.1.8: 4-({6,7-Dimethoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}methyl)-N,N-diethylbenzamide

COMPOUND 12.1.9: 4-{6,7-Dimethoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide

COMPOUND 12.1.10: N,N-Diethyl-4-{6-methoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide

COMPOUND 12.1.11: N,N-Diethyl-4-{7-methoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide

COMPOUND 12.1.12: N,N-Diethyl-4-{2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide

COMPOUND 12.1.13: 4-{2-[(2-Butyl-1H-imidazol-5-yl)methyl]-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide

COMPOUND 12.1.14: 4-{2-[(2-Butyl-4-chloro-1H-imidazol-5-yl)methyl]-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide

- COMPOUND 12.1.15: 4-{6,7-Dimethoxy-2-[(2-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.16: 4-{6,7-Dimethoxy-2-[(3-phenyl-1H-pyrazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.17: 4-(6,7-Dimethoxy-2-{[1-(phenylsulfonyl)-1H-pyrrol-2-yl]methyl}-1,2,3,4-tetrahydroisoquinolin-1-yl)-N,N-diethylbenzamide
- COMPOUND 12.1.18: N,N-Diethyl-4-{2-[(2-ethyl-4-methyl-1H-imidazol-5-yl)methyl]-6,7-dimethoxy-1,2,3,4-tetrahydroisoguinolin-1-yl}benzamide
- COMPOUND 12.1.19: 4-{6,7-Dimethoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.20: 4-{5,8-Dimethoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.21: N,N-Diethyl-4-[1,2,3,4-tetrahydro-6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1-isoquinolinyl]-benzamide
- COMPOUND 12.1.22: N,N-Diethyl-4-[2-(1H-imidazol-5-ylmethyl)-6-methoxy-1,2,3,4-tetrahydroisoquinolin-1-yl]benzamide
- COMPOUND 12.1.23: N,N-Diethyl-4-[2-(1H-imidazol-5-ylmethyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoguinolin-1-yl]benzamide
- COMPOUND 12.1.24: 4-{6,7-Dimethoxy-2-[(5-phenyl-2-furyl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.25: N,N-Diethyl-4-{6-methoxy-2-[(5-phenyl-2-furyl)methyl]-1,2,3,4-tetrahydroisoguinolin-1-yl}benzamide
- COMPOUND 12.1.26: N,N-Diethyl-4-{7-hydroxy-6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoguinolin-1-yl}benzamide
- COMPOUND 12.1.27: N,N-Diethyl-4-{7-hydroxy-6-methoxy-2-[(2-phenyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.28: 4-{2-[(1-Benzyl-1H-imidazol-5-yl)methyl]-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.29: 4-{6,7-Dimethoxy-2-[(1-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoguinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.30: 4-{6,7-Dimethoxy-2-[(1-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.31: 4-({6,7-Dimethoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}methoxy)-N,N-diethylbenzamide
- COMPOUND 12.1.32: 4-({6,7-Dimethoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}methyl)-N,N-diethylbenzamide

- COMPOUND 12.1.33: 1-{4-[(Diethylamino)carbonyl]phenyl}-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-6-yl methanesulfonate
- COMPOUND 12.1.34: 1-{4-[(Diethylamino)carbonyl]phenyl}-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-6-yl methanesulfonate
- COMPOUND 12.1.35: 1-{4-[(Diethylamino)carbonyl]phenyl}-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-6-yl dimethylsulfamate
- COMPOUND 12.1.36: 1-{4-[(Diethylamino)carbonyl]phenyl}-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-6-yl dimethylsulfamate
- COMPOUND 12.1.37: 4-{2-[(2,5-Dimethyl-1,3-thiazol-4-yl)methyl]-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.38: 4-{6,7-Dimethoxy-2-[(2-phenyl-1,3-thiazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.39: N,N-Diethyl-4-{7-isopropoxy-6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.40: N,N-Diethyl-4-[6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-7-(2-morpholin-4-ylethoxy)-1,2,3,4-tetrahydroisoquinolin-1-yl]benzamide
- COMPOUND 12.1.41: 4-{7-Ethoxy-6-methoxy-2-[(2-phenyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.42: N,N-Diethyl-4-{7-isopropoxy-6-methoxy-2-[(2-phenyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.43: N,N-Diethyl-4-{6-methoxy-7-(2-morpholin-4-ylethoxy)-2-[(2-phenyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.44: N,N-Diethyl-4-{7-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoguinolin-1-yl}benzamide
- COMPOUND 12.1.45: Methyl 5-{[1-{4-[(diethylamino)carbonyl]phenyl}-6,7-dimethoxy-3,4-dihydroisoquinolin-2(1H)-yl]methyl}-1H-imidazole-4-carboxylate
- COMPOUND 12.1.46: 1-{4-[(Diethylamino)carbonyl]phenyl}-6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-7-yl methanesulfonate
- COMPOUND 12.1.47: N,N-Diethyl-4-{6-[(4-methyl-1H-imidazol-5-yl)methyl]-5,6,7,8-tetrahydro[1,3]dioxolo[4,5-g]isoquinolin-5-yl}benzamide
- COMPOUND 12.1.48: N,N-Diethyl-4-{6-[(2-phenyl-1H-imidazol-5-yl)methyl]-5,6,7,8-tetrahydro[1,3]dioxolo[4,5-g]isoquinolin-5-yl}benzamide
- COMPOUND 12.1.49: 4-{6-Bromo-7-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.50: 4-{6-Bromo-7-methoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide

- COMPOUND 12.1.51: 4-{6,7-Dimethoxy-3-methyl-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoguinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.52: N,N-Diethyl-4-[2-(1H-imidazol-5-ylmethyl)-6,7-dimethoxy-3-methyl-1,2,3,4-tetrahydroisoquinolin-1-yl]benzamide
- COMPOUND 12.1.53: N,N-Diethyl-4-{6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-7-nitro-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.54: N,N-Diethyl-4-{6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-5-nitro-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.55: N,N-Diethyl-4-{7-[(4-methyl-1H-imidazol-5-yl)methyl]-6,7,8,9-tetrahydro[1,3]dioxolo[4,5-f]isoquinolin-6-yl}benzamide
- COMPOUND 12.1.56: N,N-Diethyl-4-{7-[(2-phenyl-1H-imidazol-5-yl)methyl]-6,7,8,9-tetrahydro[1,3]dioxolo[4,5-f]isoquinolin-6-yl}benzamide
- COMPOUND 12.1.57: N,N-Diethyl-4-{5,6,7-trimethoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.58: N,N-Diethyl-4-{5,6,7-trimethoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.59: 4-{7-(Cyclobutyloxy)-6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 12.1.60: N,N-Diethyl-4-[6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-7-(neopentyloxy)-1,2,3,4-tetrahydroisoquinolin-1-yl]benzamide
- COMPOUND 12.1.61: N,N-Diethyl-4-{6-fluoro-7-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.62: N,N-Diethyl-4-{6-fluoro-7-methoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 12.1.63: 1-{4-[(Diethylamino)carbonyl]phenyl}-6-methoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoguinolin-7-yl dimethylsulfamate
- COMPOUND 13.1.1: N,N-Diethyl-4-[6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-7-(tetrahydro-2H-pyran-4-yloxy)-1,2,3,4-tetrahydroisoquinolin-1-yl]benzamide
- COMPOUND 14.1.1: N,N-Diethyl-4-{6-methoxy-7-phenoxy-2-[(2-phenyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoguinolin-1-yl}benzamide
- COMPOUND 14.1.2: N,N-Diethyl-4-{6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-7-phenoxy-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 14.1.3: N,N-diethyl-4-{7-(4-fluorophenoxy)-6-methoxy-2-[(2-phenyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 14.1.4: N,N-Diethyl-4-{7-(4-fluorophenoxy)-6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide

- COMPOUND 14.1.5: N,N-Diethyl-4-{6-methoxy-7-(4-methoxyphenoxy)-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 14.1.6: N,N-Diethyl-4-[6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-7-(pyridin-3-yloxy)-1,2,3,4-tetrahydroisoquinolin-1-yl]benzamide
- COMPOUND 15.1.1: 4-{7-(Benzyloxy)-6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 16.4.1: N,N-Diethyl-4-{6-methoxy-7-(3-methoxyphenoxy)-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 16.4.2: N,N-Diethyl-4-{6-methoxy-7-(4-methoxyphenoxy)-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 16.4.3: 1-{4-[(Diethylamino)carbonyl]phenyl}-6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-7-yl benzenesulfonate
- COMPOUND 17.1.1: 4-{6,7-Dihydroxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoguinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 17.1.2: N,N-Diethyl-4-{6-hydroxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 17.1.3: N,N-Diethyl-4-{7-hydroxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 17.1.4: N,N-Diethyl-4-[1,2,3,4-tetrahydro-6-hydroxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1-isoquinolinyl]-benzamide
- COMPOUND 17.1.5: N,N-Diethyl-4-{7-hydroxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 17.1.6: N,N-Diethyl-4-{6-hydroxy-7-phenoxy-2-[(2-phenyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 17.1.7: N,N-Diethyl-4-{6-hydroxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-7-phenoxy-1,2,3,4-tetrahydroisoguinolin-1-yl}benzamide
- COMPOUND 17.1.8: N,N-Diethyl-4-{7-(4-fluorophenoxy)-6-hydroxy-2-[(2-phenyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 17.1.9: N,N-Diethyl-4-{7-(4-fluorophenoxy)-6-hydroxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoguinolin-1-yl}benzamide
- COMPOUND 18.1.1: 4-{2-[(1,4-Dimethyl-1H-imidazol-5-yl)methyl]-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 18.1.2: 4-{2-[(1,5-Dimethyl-1H-imidazol-4-yl)methyl]-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 19.1.1: 4-{7-Ethoxy-6-methoxy-2-[(5-methyl-1H-imidazol-4-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide

- COMPOUND 20.1.1: 4-{(1S)-6,7-Dimethoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 20.2.1: 4-{(1R)-6,7-Dimethoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}-N,N-diethylbenzamide
- COMPOUND 20.1.2: N,N-Diethyl-4-{(1S)-6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 20.2.2: N,N-Diethyl-4-{(1R)-6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoguinolin-1-yl}benzamide
- COMPOUND 20.1.3: N,N-Diethyl-4-{(1S)-6-hydroxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 20.2.3: N,N-Diethyl-4-{(1R)-6-hydroxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 20.1.4: N,N-Diethyl-4-{(1S)-7-isopropoxy-6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 20.2.4: N,N-Diethyl-4-{(1R)-7-isopropoxy-6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 20.1.5: N,N-Diethyl-4-{(1S)-7-isopropoxy-6-methoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 20.2.5: N,N-Diethyl-4-{(1R)-7-isopropoxy-6-methoxy-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 20.1.6: N,N-Diethyl-4-{(1S)-6-methoxy-7-(2-morpholin-4-ylethoxy)-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 20.2.6: N,N-Diethyl-4-{(1R)-6-methoxy-7-(2-morpholin-4-ylethoxy)-2-[(2-phenyl-1H-imidazol-5-yl)methyl]-1,2,3,4-tetrahydroisoquinolin-1-yl}benzamide
- COMPOUND 20.1.7: N,N-Diethyl-4-[(1S)-1,2,3,4-tetrahydro-6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1-isoquinolinyl]-benzamide
- COMPOUND 20.2.7: N,N-Diethyl-4-[(1R)-1,2,3,4-tetrahydro-6-methoxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1-isoquinolinyl]-benzamide
- COMPOUND 20.1.8: N,N-Diethyl-4-[(1S)-1,2,3,4-tetrahydro-6-hydroxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1-isoquinolinyl]-benzamide
- COMPOUND 20.2.8: N,N-Diethyl-4-[(1R)-1,2,3,4-tetrahydro-6-hydroxy-2-[(4-methyl-1H-imidazol-5-yl)methyl]-1-isoquinolinyl]-benzamide; and pharmaceutically acceptable salts thereof.

6-7. (cancelled)

8. (currently amended) A pharmaceutical composition comprising a compound according to <u>claim 1 any one of claims 1-5</u> and a pharmaceutically acceptable carrier.

9. (currently amended) A method for the therapy of pain in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1-5claim 1.

10. (currently amended) A method for the therapy of functional gastrointestinal disorders in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1-5claim 1.

11. (original) A process for preparing a compound of formula II,

$$R^{5}$$
 NH
 D
 R^{6}
 N
 R^{3}

Ш

comprising of the step of reacting a compound of formula III with a compound of formula IV in the presence of HNR²R³:

$$O \longrightarrow CI$$
 $O \longrightarrow CI$
 R^5
 NH_2
 III
 IV

wherein

R² and R³ are independently selected from –H and C₁₋₆alkyl;

 R^5 and R^6 are independently selected from –H, -OH, halogen, -NO₂, C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} alkoxy, C_{1-6} alkyl- C_{1-6} alk

and $(C_{1-6}alkyl)_2N-S(=O)_2-O-$; or R^5 and R^6 together form a portion of a 5 or 6-membered ring that fused with the benzene ring of formula I, wherein said $C_{1-6}alkyl$, $C_{6-10}aryl$, $C_{1-6}alkoxy$, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- $C_{1-4}alkoxy$, $C_{6-10}aryl$ -oxy, $C_{6-10}aryl-C_{1-4}alkoxy$, $C_{1-6}alkyl$ - $S(=O)_2-O-$, $C_{6-10}aryl$ - $S(=O)_2-O-$, $C_{1-6}alkyl$ - $S(=O)_2-O-$, and $(C_{1-6}alkyl)_2N-S(=O)_2-O-$ are optionally substituted with one or more groups selected from halogen, $C_{1-3}alkoxy$, $C_{1-3}alkyl$, $C_{1-3}alkyl$, $C_{1-3}alkyl$, and $C_{1-3}alkyl$; and

D is a divalent group comprising a benzene ring.

12. (original) A process for preparing a compound of formula V,

$$R^{5}$$
 R^{6}
 R^{7}
 R^{7}
 R^{2}
 R^{3}

comprising of the step of reacting a compound of formula VI with a compound of formula VII in the presence of an acid catalyst:

wherein

X is selected from -CH(OEt)₂, =CHOMe and -CHO;

R¹ is selected from –H and C₁₋₆alkyl;

R² and R³ are independently selected from –H and C₁₋₆alkyl;

 R^4 , R^5 , R^6 and R^7 are independently selected from –H, -OH, halogen, -NO₂, C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} alkoxy, C_{1-6} alkyl- $S(=O)_2$ -O-, C_{6-10} aryl- $S(=O)_2$ -O-, C_{1-6} alkyl- $S(=O)_2$ -O-, and $(C_{1-6}$ alkyl)₂N- $S(=O)_2$ -O-; or any two adjacent groups selected from R^4 , R^5 , R^6 and R^7 form a portion of a 5 or 6-membered ring that fused with the benzene ring of formula I,

wherein said C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} alkoxy, C_{1-6} alkyl- $S(=O)_2$ -O-, C_{1-6} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-6}$ alkyl) $_2$ N- $S(=O)_2$ -O- are optionally substituted with one or more groups selected from halogen, C_{1-3} alkoxy, -OH, -NO $_2$, C_{1-3} alkyl, -NH $_2$, and - CO_2 - C_{1-3} alkyl; and

D is a divalent group comprising a benzene ring.

13. (original) A process for preparing a compound of formula I,

$$R^{5}$$
 R^{6}
 R^{7}
 R^{7}
 R^{2}
 R^{3}

comprising: reacting a compound of formula VIII with E-CHO:

$$R^{5}$$
 R^{6}
 R^{7}
 R^{7}
 R^{7}
 R^{2}
 R^{3}

wherein

VIII

Y is selected from -H and -C(=O)-O-t-butyl;

R¹ is selected from –H and C₁₋₆alkyl;

R² and R³ are independently selected from –H and C₁₋₆alkyl;

 R^4 , R^5 , R^6 and R^7 are independently selected from –H, -OH, halogen, -NO₂, $C_{1\text{-}6}$ alkyl, $C_{6\text{-}10}$ aryl, $C_{1\text{-}6}$ alkoxy, $C_{3\text{-}6}$ cycloalkoxy, $C_{3\text{-}6}$ heterocyclyl-oxy, $C_{3\text{-}6}$ heterocyclyl- $C_{1\text{-}4}$ alkoxy, $C_{6\text{-}10}$ aryl-oxy, $C_{6\text{-}10}$ aryl- $C_{1\text{-}4}$ alkoxy, $C_{1\text{-}6}$ alkyl- $C_{1\text{-}4$

form a portion of a 5 or 6-membered ring that fused with the benzene ring of formula I, wherein said C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} alkoxy, C_{1-6} alkyl- $S(=O)_2$ -O-, C_{1-6} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-6}$ alkyl) $_2$ N- $S(=O)_2$ -O- are optionally substituted with one or more groups selected from halogen, C_{1-3} alkoxy, -OH, -NO $_2$, C_{1-3} alkyl, -NH $_2$, and - CO_2 - C_{1-3} alkyl;

E is a 5-membered heterocyclyl optionally substituted with one or more groups selected from halogen, C_{1-6} alkyl, $-C(=O)-O-C_{1-6}$ alkyl, C_{6-10} aryl, C_{6-10} aryl- C_{1-4} alkyl, and C_{6-10} aryl- C_{1-4} alkyl, and C_{6-10} aryl- C_{1-4} alkyl, and C_{6-10} aryl- C_{1-6} alkyl, C_{6-10} aryl- C_{1-6} alkyl, and C_{1-6} al

D is a divalent group comprising a benzene ring.

14. (original) A process for preparing a compound of formula IX,

$$R^{12}O$$
 $R^{12}O$
 R^{1

IX

comprising: reacting a compound of formula X with R¹²-OH or R¹²-B(OH)₂:

$$R^{5}$$
 R^{4}
 R^{1}
 R^{7}
 R^{7}
 R^{2}
 R^{3}
 X

wherein

Y is selected from -H and -C(=O)-O-t-butyl;

 R^{12} is selected from C_{1-6} alkyl, C_{3-6} cycloalkyl, C_{6-10} aryl- C_{1-4} alkyl, C_{3-6} heterocyclyl- C_{1-4} alkyl, C_{6-10} aryl, and C_{3-6} heteroaryl, wherein said C_{6-10} aryl, C_{3-6} heterocyclyl and C_{3-6} heteroaryl

are optionally substituted with one or more groups selected from halogen, C_{1-3} alkoxy, -OH, -NO₂, C_{1-3} alkyl, -NH₂ and -CO₂-C₁₋₃alkyl; and

R¹ is selected from –H and C₁₋₆alkyl;

R² and R³ are independently selected from –H and C₁₋₆alkyl;

 R^4 , R^5 , and R^7 are independently selected from –H, -OH, halogen, -NO₂, C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} alkoxy, C_{1-6} alkyl- $S(=O)_2$ -O-, C_{6-10} aryl- $S(=O)_2$ -O-, C_{1-6} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-6}$ alkyl) $_2$ N- $S(=O)_2$ -O-; or R^4 and R^5 together form a portion of a 5 or 6-membered ring that fused with the benzene ring of formula I, wherein said C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} 6cycloalkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} 4alkoxy, C_{1-6} alkyl- $S(=O)_2$ -O-, C_{6-10} aryl- $S(=O)_2$ -O-, C_{1-6} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-6}$ alkyl) $_2$ N- $S(=O)_2$ -O- are optionally substituted with one or more groups selected from halogen, C_{1-3} 3alkoxy, -OH, -NO₂, C_{1-3} alkyl, -NH₂, and - CO_2 - C_{1-3} alkyl; and

D is a divalent group comprising a benzene ring.

15. (original) A process for preparing a compound of formula XI,

comprising:

reacting a compound of formula XII with NsCl, NsBr, or (CF₃CO)₂O to protect the =NH group of formula XI;

reacting the protected compound with $R^{14}-Y^{1}$ followed by deprotecting the =NH group:

$$(R^{13})_n$$
 NH
 NH
 R^2
 R^3
 R^3

wherein

n is 0, 1, 2 or 3;

each R^{13} is independently selected from -H, -OH, halogen, $-NO_2$, C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} alkoxy, C_{1-6} alkyl- $S(=O)_2$ -O-, C_{6-10} aryl- $S(=O)_2$ -O-, C_{1-6} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-6}$ alkyl) $_2$ N- $S(=O)_2$ -O-; or any two adjacent R^{13} form a portion of a 5 or 6-membered ring that fused with the benzene ring of formula I, wherein said C_{1-6} alkyl, C_{6-10} aryl, C_{1-6} alkoxy, C_{3-6} heterocyclyl-oxy, C_{3-6} heterocyclyl- C_{1-4} alkoxy, C_{6-10} aryl-oxy, C_{6-10} aryl- C_{1-4} 4lkoxy, C_{1-6} alkyl- $S(=O)_2$ -O-, C_{6-10} aryl- $S(=O)_2$ -O-, C_{1-6} alkyl-NH- $S(=O)_2$ -O-, and $(C_{1-6}$ alkyl) $_2$ N- $S(=O)_2$ -O- are optionally substituted with one or more groups selected from halogen, C_{1-3} 3lkoxy, -OH, -NO $_2$, C_{1-3} alkyl, -NH $_2$, and - CO_2 - C_{1-3} alkyl;;

Y¹ is halogen;

 $R^{14} \text{ is selected from C_{1-6} alkyl-$S(=O)_2$-, C_{6-10} aryl-$S(=O)_2$-, C_{1-6} alkyl-$NH-$S(=O)_2$-, and $(C_{1-6}$ alkyl)_2$N-$S(=O)_2$-;}$

R¹ is selected from –H and C₁₋₆alkyl;

R² and R³ are independently selected from –H and C₁₋₆alkyl; and

D is a divalent group comprising a benzene ring.

16. (new) A method for the therapy of anxiety in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to claim 1.